

**Notice of Allowability**

Application No.

10/717,337

Examiner

Sam Dillon

Applicant(s)

BENEDIX ET AL.

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 27 March 2006.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 1/18/06, 5/16/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

1. The Examiner acknowledges the applicant's submission of the amendment dated March 27, 2006. Per the amendment, Claim 1 has been amended.
2. The instant application having Application No. 10/717,337 has a total of 4 claims pending in the application; there is 1 independent claim and 3 dependent claims, all of which are ready for examination by the examiner.

#### **I. ACKNOWLEDGEMENT OF INFORMATION DISCLOSURE STATEMENT**

3. The information disclosure statements (IDS) submitted on January 18, 2006 and May 16, 2006 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.
4. As required by M.P.E.P. ' 609 (C), the applicant's submission of the Information Disclosure Statements dated January 18, 2006 and May 16, 2006 are acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by M.P.E.P. ' 609 C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

#### **II. EXAMINER'S AMENDMENT**

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

6. Authorization for this examiner's amendment was given in a telephone interview with Yonghong Chen (*Reg. No. 56,150*) on May 31, 2006. Accordingly, since a complete record of the interview has been incorporated in the instant examiner's amendment, no separate interview summary form is included in the instant office letter MPEP ' 713.04.

7. The application has been amended as follows:

a. As **Claim 1** reads on page 2 of the amendment dated March 27, 2006, replace the phrasing “ ... *whereby an access strategy **can be** ...* ” on line 12 of the claim with “ ... *whereby an access strategy **consists of either** ...* ”.

8. **NOTE:** The claims amended by this examiner's amendment have been referred to by their original claim number and, if renumbered at time of allowance, also by the new number located in parentheses are required by MPEP ' 1302.04(g).

### **III. REASONS FOR ALLOWANCE**

9. The following is an examiner's statement of reasons for allowance (*see MPEP 1302.13*). The primary reason for the allowance of **Claim 1** in the instant Application is the inclusion of the combination of two limitations.

The limitation “*whereby an access strategy **consists of either** leaving open banks of the main memory after a first access or closing the banks of the main memory after the first access*” is interpreted to require that the only access strategies analyzed by the method are whether to leave open or to close the memory banks. Mekhiel et al. (“*Performance analysis for a cache system with different DRAM designs*”) does not

disclose testing only whether to leave open or to close the memory banks (*Mekhiel, sections 4-8 and figures 3-4*).

The limitation “*assigning a value corresponding to an execution speed of the application or the system processor to **each of the access strategies***” is interpreted to require that a distinct value exists for each access strategy. Foster (*US Patent Number 6,052,134*) does not disclose assigning a value to each access strategy (*Foster, column 2 lines 61-66*).

Though the combination of Mekhiel and Foster fulfills every limitation of Claim 1, the Examiner can find no reasonable motivation to warrant the combination. Therefore, the prior art of record neither anticipates nor renders obvious the above recited combination. Because **Claims 2-4** depend directly on Claim 1, these claims are considered allowable for at least the same reasons noted above.

Any comments considered necessary by the applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “*Comments on Statement of Reasons for Allowance.*”

#### **IV. RELEVANT ART CITED BY THE EXAMINER**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mekhiel et al. ("*Performance analysis for a cache system with different DRAM designs*") discloses comparing between normal DRAM access, precharged DRAM access and fast page DRAM access (figures 3-4).

#### **V. CONCLUSION**

##### **a. STATUS OF CLAIMS IN THE APPLICATION**

11. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. ' 707.07(i):

Claims 1-4 allowed.

##### **b. DIRECTION OF FUTURE CORRESPONDENCES**

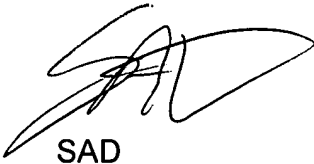
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Dillon whose telephone number is 571- 272-8010. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Sparks can be reached on 571-272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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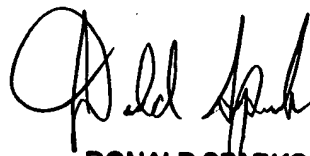
**IMPORTANT NOTE**

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SAD

Sam Dillon  
Examiner  
Art Unit 2185



DONALD SPARKS  
SUPERVISORY PATENT EXAMINER